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**TRANSMITTAL
FORM**

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10/719,821

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First Named Inventor

NISHIYAMA, Shinichi

Art Unit

2835

Examiner Name

Unassigned

Attorney Docket Number

16869P-098800US

ENCLOSURES (Check all that apply)☐

Fee Transmittal Form

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Fee Attached

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Amendment/Reply

☐

After Final

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Affidavits/declaration(s)

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Extension of Time Request

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Express Abandonment Request

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Information Disclosure Statement

☐

Certified Copy of Priority Document(s)

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Reply to Missing Parts/ Incomplete Application

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Reply to Missing Parts under 37 CFR 1.52 or 1.53

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Drawing(s)

☐

Licensing-related Papers

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Renewed Petition to Make Special

☐

Petition to Convert to a Provisional Application

☐

Power of Attorney, Revocation Change of Correspondence Address

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Terminal Disclaimer

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Appeal Communication to TC (Appeal Notice, Brief, Reply Brief)

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Proprietary Information

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Status Letter

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Remarks

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SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm Name

Townsend and Townsend and Crew LLP

Signature

Printed name

Chun-Pok Leung

Date

September 19, 2005

Reg. No.

41,405

CERTIFICATE OF TRANSMISSION/MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date shown below.

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Joy Salvador

Date

September 19, 2005



PATENT
Attorney Docket No.: 16869P-098800US
Client Ref. No.: 340300561US01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Shinichi NISHIYAMA *et al.*

Application No.: 10/719,821

Filed: November 20, 2003

For: COOLING STRUCTURE FOR
ELECTRONIC DEVICES

Customer No.: 20350

Examiner: Unassigned

Technology Center/Art Unit: 2186

Confirmation No.: 2877

**RENEWED PETITION TO MAKE
SPECIAL FOR NEW APPLICATION
UNDER M.P.E.P. § 708.02, VIII & 37
C.F.R. § 1.102(d)**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Decision dated August 29, 2005 dismissing the original petition to make special, Applicants respectfully submit a renewed petition to make special the above-identified application under MPEP § 708.02, VIII & 37 C.F.R. § 1.102(d). The application has not received any examination by an Examiner.

(a) The Commissioner has previously been authorized to charge the petition fee of \$130 under 37 C.F.R. § 1.17(i) and any other fees associated with this paper to Deposit Account 20-1430.

(b) All the claims are believed to be directed to a single invention. If the Office determines that all the claims presented are not obviously directed to a single invention, then Applicants will make an election without traverse as a prerequisite to the grant of special status.

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(c) Pre-examination searches were made of U.S. issued patents, including a classification search and a key word search. The classification search was conducted on or around November 10, 2004 covering Class 165 (subclasses 80.3 and 104.33), Class 312 (subclass 236), and Class 361 (subclasses 676, 678, 687, 688, 690, 694, and 695), by a professional search firm, Lacasse & Associates, LLC. The key word search was performed on the USPTO full-text database including published U.S. patent applications. The inventors further provided seven references considered most closely related to the subject matter of the present application (see references #7-13 below), which were cited in the Information Disclosure Statement filed with the application on November 20, 2003.

(d) The following references, copies of which were previously submitted, are deemed most closely related to the subject matter encompassed by the claims:

- (1) U.S. Patent No. 5,063,475;
- (2) U.S. Patent No. 5,136,464;
- (3) U.S. Patent No. 5,297,005;
- (4) U.S. Patent No. 5,361,188;
- (5) U.S. Patent No. 5,544,012;
- (6) U.S. Patent Publication No. 2004/0004813 A1;
- (7) Japanese Patent Publication No. 10-205830;
- (8) Japanese Patent Publication No. 07-020994;
- (9) Japanese Patent Publication No. 05-204493;
- (10) Japanese Patent Publication No. 06-084338;
- (11) Japanese Patent Publication No. 09-312255;
- (12) Japanese Patent Publication No. 2000-122815; and
- (13) Japanese Patent Publication No. 10-275514.

(e) Set forth below is a detailed discussion of references which points out with particularity how the claimed subject matter is distinguishable over the references.

A. Claimed Embodiments of the Present Invention

The claimed embodiments relate to a cooling structure for electronic devices. In the specific embodiment shown in Figures 3-4, a disk drive module (a first electronic device accommodating box) 300 in which a plurality of disk drives (electronic devices) 310 are accommodated in a neatly arranged manner is accommodated in an upper stage (a first accommodating portion for accommodating the first electronic device accommodating box which is defined at a stage close to a ceiling) of the casing 200. In the ceiling of the casing 200, a vent portion which allows the ventilation between the inside and the outside of the casing 200 is formed. In a middle stage (a second accommodating portion for accommodating the second electronic device accommodating box which is defined at a stage remote from the ceiling) of the casing 200, a logic module (the second electronic device accommodating box) 400 is accommodated with respect to the controller 110 or the integral-type device 130, while the disk drive module (the first electronic device accommodating box) 300 is accommodated with respect to the driver 120. Air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct. Air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct.

Independent claim 1 recites a cooling structure for electronic devices wherein a plurality of electronic device accommodating boxes in which electronic devices are accommodated are accommodated in a casing in multiple stages. A vent portion which allows ventilation between the inside and the outside of the casing is formed in a ceiling of the casing. In a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, a hollow duct having two opening faces is arranged. The first opening face faces the vent portion. The second opening face faces a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling. Air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct. Air inside the first electronic device accommodating box which is

accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct.

One of the benefits that may be derived is that air from the electronic devices accommodated in the middle stage and the lower stage of the casing can be efficiently introduced into the air duct and be discharged; air from the electronic devices accommodated in the upper stage of the casing can be made to reach the ceiling of the casing along the outer wall surfaces of the air duct and be discharged; and it is possible to accommodate the power source part in the lower portion of the casing. It is thus possible to discharge air efficiently from respective electronic devices.

B. Discussion of the References

1. U.S. Patent No. 5,063,475

This reference discloses a multileveled electronic assembly with cooling means. Disclosed is each of the individual duct members (D1-D4) of cooling means 33 including a longitudinal chamber portion 45. The portion 45 connects to a flared end portion 47 of curved configuration so as to direct an upwardly forced air onto adjacent electronic components on different substrates 13. See Figs. 1, 2, 4-5, and 8-9; and column 5, lines 15-41.

The reference discloses a cooling structure centrally disposed for providing cooling fluid to each of the heat generating components. The cooling means 33 does not, however, have the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing

from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

2. U.S. Patent No. 5,136,464

This reference relates to a housing structure for housing a plurality of electronic components. Disclosed is a confluence preventing section 22 arranged in an intermediate space between a lower side PC board supporting section 18 and the upper side PC board supporting section 20. Air is passed to an air exhaust point 16A formed in an upper panel 16. See Figs. 2, 3B, 6, and 10; column 5, lines 5-15; and column 6, lines 6-24.

The reference discloses an air passage section, formed between the air exhaust section in the hexahedron space in the skeleton frame member 12, for passing air exhausted from the lower side electric component housing body along a pair of side panels (col. 5, lines 5-15; and Fig. 2). The air passage section does not have the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

3. U.S. Patent No. 5,297,005

This reference discloses electronic components in a cabinet 30 having an exhaust fan F that creates a primary air flow across the components are cooled by a cooling enclosure 11 which encloses predetermined heat generating electronic components C to isolate them from other electronic components in the cabinet. An air inlet conduit 18 connects the cooling enclosure 11 with the air inlets in the cabinet and an air outlet conduit 19 connects the enclosure with the air outlets of the cabinet and the exhaust fan F. The

conduits and enclosure define a secondary air flow pathway across the isolated electronic components to the air outlets and exhaust fan. The secondary air flow is isolated from the primary air flow through the cabinet. The exhaust fan creating the primary air flow across the non-isolated components simultaneously creates a separate secondary air flow through the secondary air flow pathway across the isolated heat generating components whereby the non-isolated components and the isolated components are independently cooled by the primary air flow and secondary air flows, respectively, and the heat generated by the isolated components and non-isolated components is not mixed within the cabinet to maximize cooling of all components within the cabinet. See Fig. 3.

The reference discloses a cabinet 30 with primary air flow and secondary air flow for cooling. The apparatus is different from the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

4. U.S. Patent No. 5,361,188

This reference discloses a cooling apparatus of an electronic equipment, in which a plurality each of integrated circuit devices 2 and large-scale integrated circuit devices 7 are mounted onto a plurality of substrates 1, respectively, and a cooling fan 13 supplies cooling air from outside to each of these integrated circuit devices. A duct 30 having a comb-tooth shape suitable for encompassing each substrate and defining flow paths along the substrates introduces the cooling air supplied by the cooling fan to each of the integrated circuit devices. The duct 30 includes a plurality of small holes 6 disposed at positions corresponding to the positions of the integrated circuit devices on the substrates and having

open areas corresponding to the heating values of the integrated circuit devices. The small holes 6 flow the cooling air supplied by the cooling fan as jet streams to the integrated circuit devices. This jet stream cooling improves cooling performance and can make uniform the temperature distribution of the integrated circuit devices. See Fig. 2; and col. 5, line 41 to col. 6, line 2.

The reference discloses a cooling structure having ducts 30 with small holes 6 to improve cooling. The disclosed structure is different from the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

5. U.S. Patent No. 5,544,012

This reference discloses a cooling system for cooling electronic apparatus. Disclosed is a cooling system having a vertical duct 20 provided between device modules 11 and a rear cover 17. The rear and middle parts of electronic elements 1 are cooled by air streams 5a and 5b. Guide members, including orientation plates 23, partition plates 24, a guide plate 25, and a seal plate 26, are used to guide the air stream through the apparatus. See Figs. 2, 3, 7-12, 21, and 24; column 5, lines 45-63; and column 6, lines 5-17 and 57-62.

The reference discloses a vertical duct with a plurality of guide members to guide the cooling air for cooling. The apparatus as disclosed is different from the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device

accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

6. U.S. Patent Publication No. 2004/0004813 A1

This reference relates to a computer rack cooling system. Disclosed is a rack 108 having a vent at the ceiling. The vent is a form of a hood enclosure or plenum 130. The plenum 30 includes a fan 146 for exhausting air heated by components within rack 108 of a computer. A vent in the form of a hood enclosure or plenum 130 optionally including fan(s) 146 may be provided to exhaust air heated by components within the computer to the exterior of the site. Air is exhausted from inside the rack 98 in an upward direction to take advantage of the buoyancy exhibited by heated air. See Figs. 5-6; and paragraphs [0064] and [0066].

Although the reference discloses a vent in the form of a plenum 130, it does not disclose the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

7. Japanese Patent Publication No. 10-205830

This reference relates to an inverter control circuit apparatus for air conditioning equipment, to lower the material cost and assembling cost by facilitating the assembling of electric parts composing an inverter control circuit while reducing the number of connection wires. In an inverter control circuit apparatus mounted on an outdoor unit of air conditioning equipment, a power transistor module 19, a noise filter circuit 9, a diode stack 15, and capacitors 11 and 13 composing an inverter control circuit are made up of electric parts mountable on a substrate. The electric parts are mounted on one sheet of substrate 17 and an electric panel 1 is so mounted through a substrate holder 3 that the surface where the parts are mounted of the substrate 17 is positioned in a cooling air passage 3c.

The reference discloses a cooling air passage 3c for cooling parts on the substrate 17. It does not, however, disclose the claimed structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

8. Japanese Patent Publication No. 07-020994

This reference discloses a technique to easily extend and vary the scale of the storage system of a large-sized computer and to maintain the system by degeneration and hot-line insertion and extraction. Plural host adapters (host-side interface) 1 is connected to a host CPU, plural disk adapters (storage device side interface) 2 connected to an array disk 5, and cache memories 3 for temporary storage that are shared by those adapters are fitted onto

common buses 4 that are shared by those adapters and cache memories in a free insertion and extraction state. For an extension of the scale, adapters 1 and 2 and cache memories 3 which are as many as required are only added. The adapters 1 and 2, cache memories, and common buses are duplexed to enable degenerative operation in the case of a fault, and the joint parts between the adapters and cache memories, and common buses are so constituted that hot-line insertion and extraction are enabled and maintenance inspection and component replacement can be done without stopping the system.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

9. Japanese Patent Publication No. 05-204493

This reference discloses a semiconductor disk device which can be extended so that various units can be connected at an optional position via an inside bus and that an optional semiconductor disk system fitted to a using purpose can be composed in a single device. Plural connectors 7 of a same shape which are connected on a back board 6 are provided and the signal of the respective connectors is set to be common so that a control unit 8, a semiconductor memory unit 9, and HDD backup unit 10, and a battery unit 11 can be selectively connected at the optional position of the connectors 7. Thus, inside unit constitution is freely selected/connected so that various systems can be constituted in the single device.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

10. Japanese Patent Publication No. 06-084338

This reference relates to a system with a built-in array type recording device by storing plural small recording devices inside the housing of a large recording device. As magnetic disk devices for the array type disk device 30, 2.5 inch magnetic disk devices are used; and inside a housing 31 for 5.25 inch, plural 2.5 inch magnetic disk devices 9a-9f and an array controller 13 are stored. Thus, by using the plural 2.5 inch magnetic disk devices 9a-9f and making the same size as the 5.25 inch magnetic disk device as a whole, the storing space for the 5.25 inch magnetic disk device which is used in personal computers, work stations, etc., are utilized as it is for incorporating the array type disk device.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is

discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

11. Japanese Patent Publication No. 09-312255

This reference discloses an aligner to suppress the tilt and rocking of the whole device and improve the synchronous performance of a mask stage with a substrate stage. Since a mask stage 16 and a substrate stage 14 are supported by being floated above a base member 12, both stages 16 and 14 are driven by a linear motor 13 along a scanning direction in the opposite directions by non-contact, and the momentum is kept without permitting the base member 12 and other parts to apply any force to the stages 16 and 14 when the stages are driven. Since the mass ratio of the stage 16 to the stage 14 are set at the same value as the reduction ratio of a projection optical system, the speed ratio of the stage 16 to the stage 14 becomes the inverse number of the reduction ratio of the stage 16 to the stage 14 becomes the inverse number of the reduction ratio of the projection optical system by the principle of momentum conservation, and both stages 16 and 14 are accurately and synchronously controlled.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

12. Japanese Patent Publication No. 2000-122815

This reference discloses a way to determine the quantity of mounted modules according to the purpose of their use by constituting a module receiving means so that any of

modules equipped with various functions can freely be inserted and extracted, and the connector of any module can be physical freely attached to and detached from the connector of any back board. An opening part 21 is formed at the front part of an enclosure 2 as the module receiving means of this magnetic disk drive 1 and a back board 3 is provided at the inner part and provided with the proper number of back board connectors 31 in the same shape. Various modules 5 having individual functions can freely be inserted into and extracted from the opening part 21. A module 5 contains various elements constituting the module 5 in a module enclosure 51 as a chassis means all in the same shape irrelevantly to the function and a module connector 52 which can freely be attached to and detached from the back board connector 31 is arranged on the back.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

13. Japanese Patent Publication No. 10-275514

This reference relates to a lighting system that is hardly damaged and capable of being miniaturized. The lighting system is provided with a printed circuit board 1 mounting a plurality of electronic parts 4 for lighting a lamp, a resin case 2 provided with an opening 5 for incorporating the printed circuit board and housing the printed circuit board 1, and a metal cover 3 covering the opening 5 of the resin case 2. In the resin case 2, a pair of side plates 2a and 2b have their heights that are substantially equal to or slightly higher than the electronic parts provided in the vicinity of the side plates 2a and 2b of the printed circuit board 1.

The reference does not show a cooling structure of a vent portion, a first accommodating portion, and a second accommodating portion. More specifically, the reference fails to teach a vent portion formed in a ceiling of the casing, a first accommodating portion for accommodating the first electronic device accommodating box which is defined at the stage close to the ceiling, and a second accommodating portion for accommodating the second electronic device accommodating box which is defined at the stage remote from the ceiling, wherein air inside the second electronic device accommodating box which is accommodated in the second accommodating portion is discharged outside the casing from the vent portion through the inside of the duct, and air inside the first electronic device accommodating box which is accommodated in the first accommodating portion is discharged to the outside of the casing from the vent portion along an outer wall surface of the duct, as recited in independent claim 1.

(f) In view of this petition, the Examiner is respectfully requested to issue a first Office Action at an early date.

Respectfully submitted,



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